



The
Patent
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1/1 JAPIO - (C) JPO & Japio

PN - ***JP9206559*** A 970812

AP - JP1799196 960202

TI - CONTACT REDUCING METHOD OF NITROGEN OXIDES

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PAC - JP

- JP

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AB - PROBLEM TO BE SOLVED: To obtain a contact reducing method of nitrogen oxides by using hydrocarbons as a reducing agent and to provide a contact reducing method of nitrogen oxides by which nitrogen oxides in exhaust gas can be stably and efficiently reduced by a contact method without using a large amt. of a reducing agent even in the presence of oxygen, sulfur oxides and water content. (19)(11)

- SOLUTION: In the contact reducing method of nitrogen oxides contained in exhaust gas by using hydrocarbons as a reducing agent in the presence of a catalyst, an oxidation catalyst for nitrogen oxides is brought into contact with exhaust gas in a first stage to oxidize nitrogen monoxide (NO) in the exhaust gas into nitrogen dioxide (NO₂). Then in a second stage, hydrocarbons are added to the exhaust gas and the mixture is brought into contact with a reducing catalyst for nitrogen oxides selected from silver, silver oxide and silver aluminate to reduce nitrogen oxides into nitrogen.



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Reduction of nitrogen oxide(s) - where the waste gas is contacted with oxidising catalyst and after adding hydrocarbon to the waste gas, it is contacted with reducing catalyst selected from Silver@, Silver oxide and silver aluminate to reduce

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
JP 9206559	A	19970812	JP 9617991	A	19960202	B01D-053/94	199742 B

Abstract (Basic): JP 9206559 A

In the reduction of NOx in waste gas in the presence of catalyst using hydrocarbon as the reducing agent, the waste gas is contacted with NO oxidizing catalyst to oxidise NO to NO₂ and after adding hydrocarbon to the waste gas, it is contacted with NO₂ reducing catalyst selected from Ag, Ag₂O and silver aluminate to reduce NO₂ to N₂.

ADVANTAGE - NOx in waste gas is stably and effectively reduced without using a large quantity of reducing agent even in the presence of O₂, sulphur oxide(s) and water.

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